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# Thesis

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Nervous Debility; its Causes,  
Consequences, and Principles of Treatment.

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# Thesis

I

To any casual observer it must be evident that within late years the increase of that class of diseases usually termed "Nervous" has been greatly in the ascendency. The attention of the members of the Profession to this class of diseases has also of late been more specially directed. And the investigations that have been made, have cleared up to a great extent the Pathology of these obscure complaints; as well as bringing out the true value of the Therapeutic agents employed in their relief. No greater assistance I am convinced has been rendered to the progress made, than has been done by enlisting the Aids of Electricity in our service, its value being not only of a diagnostic character, but also a pyrexia

(2)  
therapeutic agent. Fatigue of the "Nervous System", is that condition of things, where a diminution of nerve power is at the root of functional disorders of varied character. It is a state of matters not confined to the poor alone but exists in the midst of the greatest

refinement and opulence. And we who are alive today enjoying positions of affluence and ease, owe not a few of the inherited nervous tendencies of our natures, to the severe mental toil and strain and busy commercial life of our ancestors. The very fact of our days being cast in this age of luxuriant civilization means, that this very state of things has been attained to, by the wear and tear and at the expense of the brain and nerve power of those who have

preceded us. It therefore would seem  
hard in the ordinary course of events,  
to preserve the members of a family  
from some exhausting cause, even  
for a single generation, apart from  
that cause, being of a noxious character,  
reflecting disgrace on the progenitors.

I would have a clear distinction  
drawn however, between an Affection  
depending upon a State of exhaustion, and  
that the result of degeneration of the  
tissues involved. Thus diseases of  
the "Nervous System" would seem to  
fall naturally under the two heads, of  
"Hereditary" complaints, and "Acquired" com-  
plaints; the former of these due to the  
errors of a forefather, the latter  
being the result of the transgression of  
the laws of health by the individual  
himself. And now to speak regarding

those "Acquired" affections, the contraction of  
 which is unavoidable in the life of  
 many men. An example you have  
 the active man of business watching with  
 keen eye the fluctuations of the "Stock  
Exchange". Knowing that the next round  
 in the "wheel of fortune" may ruin him  
 and his family perhaps in ruin. Or again  
 in the race for learning and honour,  
 how many are laying the seeds of  
 future bodily suffering, so that when  
 the coveted prize has at last been  
 grasped and all their golden hopes  
 are on the brink of realization, they  
 find the pleasure fade and vanish  
 like the snow-flake on the river.  
 The fact is that the "High Pressure"  
 kind of life all time now a days is  
in itself sufficient to produce & foster  
 those "Acquired" Nervous tendencies I have referred to.

But on the other hand these same affections may be induced by a train of events, less estimable in their nature but as certain in their action, and also which can and ought to be avoided. I refer to the indulgence by the individual in vices. The acquired appetite which leads to the use in excess of intoxicating liquors, opium, or tobacco, all and each of which have their undoubted effects.

The natural strength and coarseness of the original fibre, may for a time resist the deleterious action, but the "day of reckoning" will assuredly come when an outraged and ill used humanity will cry out for justice. But, alas! in many too late for retrenchment the root strength has been tapped and the tall and stately tree, once so grand and majestic must droop and rot, becoming the abode

of decay and death.

Of the "Constitutional or Hereditary" nervous tendencies, on the other hand, we have them appearing under various forms.

They may show themselves in the unfortunate inheritor of them in the same shape as they existed in the original soil, but not unfrequently they assume a totally different aspect.

Thus, were the father or grand father of any one of us addicted to intemperance or a person who gave rise to any wild passion of his nature, probably of his descendants, one might be epileptic, another arthritic, another hypochondriacal, while a fourth might be a hope less idiot. But here I would observe that the striking phenomenon may occur of these constitutional tendencies selecting only certain members of a



Lamely while the not-so free; or what-  
is even more peculiar, where they  
will have over a first generation,  
manifesting themselves only in the second.

The possessors of such "hereditary"  
Nervous tendencies are not necessarily the  
victims of Actual disease, but they have  
a certain liability within themselves  
from the outset of existence to "perversions"  
of nervous force, and are more susceptible  
to any cause that would produce  
such "perversions"; though an individual  
of originally sound constitution would be.

The tendency may lie dormant till the  
particular exciting cause call it forth,  
when it will then appear with an  
intensity governed by the extent of  
hereditary proclivity possessed.

The Brain and Nervous system in  
their relations with the body, represent an

Analogy to the export- and import-trade  
 of a country, as long as supply and  
 demand are equal all is well;  
 disturb the balance however and disorder  
 results. What any of us may be able  
 to accomplish depends greatly on the  
 extent of our physical powers, and  
 therefore our aim shd. be to preserve  
 that constant state of equilibrium  
 which constitutes health. Viewing  
 the subject from this stand point I would  
 now pass on to speak of certain  
influences which tend to upset this  
 state of equilibrium so essential to  
nervous vigor. And first I would  
 direct attention to certain states of  
 the atmosphere. It is known that  
 there occur two tides of positive  
electricity or magnetism in the air daily;  
 the flow of which tides are between 9 and 12

in the morning and again between 6 and 9 in the evening, while the periods of ebb are between 2 and 5 P.M. and 1 and 5 A.M.

During the hours that correspond with the flow of these tides it seems to me that people of a "nervous tendency" in a marked degree and others even of ordinary constitution, are able to undergo more mental exertion than at other periods of the day; while the hours synchronous with the ebb of the same tides, are those in which disinclination and inability for exertion exists. Negative electric currents, on the other hand exert the same influence always, namely — to depress and fatigue us; a sensation which all must have experienced prior to a thunderstorm, when negative electricity predominates. Certain seasons of the year have the

electric element - more abundant - than others.

For example, in Autumn and Winter it is in excess, while in Spring and Summer it is diminished in quantity.

May this not account for the latitude we feel in Summer, as well as the heat - which we generally attribute it to.

And I think it explains so far how it is that attacks of Spasmodic Asthma are more frequent during Spring and Summer in those who are subject to it, than they are at other seasons.

This I have had special opportunity of observing, as this complaint is well marked in no less than three members of my own family.

Such influences as I have referred to act no doubt - by producing a certain disturbance in the relationship of the ultimate elements of which

nerve substance is composed. The experiments of Du Bois-Reymond prove this theory of Molecular Changes to be correct, and the result of such changes are certain symptoms of Nervous Debility.

In "Nervous Debility" from hereditary predisposition the main cause at work is Mal-nutrition and the transmission to the offspring of imperfect elementary tissues. Be close things as they may, whether the nervous tendency be hereditary or induced, this seems certain that whatever interferes with the Natural line of the currents from any of the great Centres will produce functional derangements. The investigations of Dr. Raabe of Munich go to prove this, he found that if the Natural currents through the spinal cord of an animal be interfered <sup>with</sup> as regards their direction

a morbid state of reflex excitability was  
 set up, along with a miserable state  
 of health, the normal state being returned  
 to on the reestablishment of the Natural  
line of currents. This condition in  
 animals I consider analogous to, what-  
 in the human subject under the same  
reversed currents of "home force" would  
 be termed "Nervous Sympyia" and had  
 the animal sufficient intelligence to  
appreciate its symptoms it would ex-  
 perience all the horrors of the Hypochon-  
 chriacal State. For as Dr. Gull remarks  
 in his article upon "Hypochondriasis" in  
 "Reynolds System of Medicine" — "This state  
 is due to a disturbance of the Spinal  
 and Sympathetic systems, reacting on a  
high degree of central development,  
 liable to pass even into degeneration of  
 tissue!"

The state of the Blood I would now pass on to observe exerts a powerful influence on the condition of the "Nervous System". Morbid states of this fluid produce various forms of Nervous dis-affection, so that too little blood or low blood, act as exciting agents of Nervous ~~ex~~haustion, in the same way as would the poisons of Mercury, Syphilis, or Urea circulating in it. The question however may be asked, how comes it that the state of the blood exerts such an influence upon the Nervous Vigor of the individual? It is through the medium of that division of Nerves termed the "Sympathetic System" - whose duty it is to preside over the functions of organic life and the processes of Nutrition. The close connection of this system with Nutrition may be seen from

the fact that its fibres can be traced into close proximity with the secreting cells of all glands, as also into a large proportion of the muscular apparatus which directly administers to organic functions, such as those muscles which surround the alimentary canal from the mouth down.

While on the other hand, the connection of this "Sympathetic System" with the "Cerebro-Spinal" is quite as intimate in its nature as that which it has with Nutrition.

Thus from the close relationships I have indicated, you see how easy it is for an emotion of the mind to exert its influence upon some remote organ and vice versa. That the unknown force or unseen agent in all this connection is Electricity has been demonstrated beyond a doubt through the experiments of him I have already mentioned.



- Du Bois-Reymond. As early as 1786 Galvani showed the existence of this subtle fluid in the nerves of animals. The fact of the identity of these currents with Electricity is shown, by their decomposing such fluids as the Iodide of Potash in solution, and by their producing magnets in the needle of a galvanometer. Besides certain creatures as the Torpedo and the Gymnotus Electricus possess marked electric qualities and have special organs for its generation. This electric force we have been speaking about - depends for its existence, upon the vital processes of assimilation and nutrition. Its generation depends upon the proper quantity and quality of the blood circulating.

But then this very state of blood upheld, is the result of properly adjusted electric processes in the nerve centres; and nerve &

brain force depend upon the nutritive processes going on in nerve tissue; these same forces in their turn again being essential to the nutritive processes going on in their own structure. Thus you see the great law of circularity brought-out and the mutual interdependence of every part and function upon each other; the whole when properly and equally adjusted constituting what we call health.

But to proceed with the causes which operate to destroy the equilibrium of the processes and relations already referred to, and by this destruction produce "Nervous Debility"; I would first direct attention to such of them as will induce Nervous prostration in a person of previously sound habit of body. Thereafter I shall glance at those implanted in the system from birth, or the hereditary causes.

First ~~then~~ among those causes producing nervous derangement in a previously sound subject, I would direct attention to Sexual Excesses. These are fertile sources of nervous prostration especially when indulged in by those of immature age. Too frequent-indulgence may act in this way, that the exhaustion which follows the excitement has not time to be recovered from before the act is again perpetrated; a wearing out process is thus going on, while at the same time a state of chronic irritation is induced in the generative organs themselves causing them from the presence of this very irritation to be constantly, crying out as it were for the act to be repeated. Such a state of matters is brought about by the irritable genital setting up a state of

"hyperaemia" of that portion of the "Medulla Oblongata" which presides over the sexual emotions, constant morbid desires therefore resulting. The exhaustion induced thereby specially in the young is due no doubt - to all the vital and nervous power being determined to the immature organs forced to act duly; the other vital processes, such as nutrition etc; languish - ing in consequence. I would here advert in a word or two to that class of sexual excesses where the indulgence is after unnatural methods.

I am convinced there are a great source of nervous debility in the practices of the present day. They have given birth to a class of literature much in circulation, the tone of which is indecent and impure in the extreme. Such publications are nothing else, I state, than the refuge

of lying "Charlatans" who bring quack to their own mill, turn their back on truth and honour. All I have to observe on this point is, that the perverted use of any organ or function of the body, as well as of the organs of generation, will tell more rapidly and give rise to greater prostration ~~than~~ the natural use would. No, even though it were slightly in excess. The renunciation of the evil course and healthy employment - mentally and physically is the great source of cure, just as the bad effects of alcohol or tobacco are counteracted by giving them up.

Now turn to look at certain causes arising in the various processes of Alimentation. In so doing we will consider principally the errors committed by the individual which set-up morbid conditions, rather than the morbid states

of the organs themselves. Constant misleading of the digestive organs will ere long set up a nervous dyspeptic condition of matters. Insufficient or scant allowances, the very opposite state of matters, will induce a similar condition if persevered in for any length of time. Leaving the element of mere quantity out of sight, the same condition of things may be induced by the vicious quality of the diet partaken of. Amidst the many artificial usages and luxuries of modern social life how fertile the sources of nervous disturbances acting through the digestive system. And this leads me here to speak for a moment regarding the effects of Alcohol and Tobacco.

Their effects differ, I hold according to the age of the individual using them. In youth the process of oxidation

on which depends the development and vigor of its body, is in its fullest activity. Now each of the foregoing substances have the power of arresting this process and so impairing development - and paving the way to early tissue changes. In old age again, at virtue of this very power of checking oxidation these substances should become of use, provided they are put to use in moderation. ~~They~~ check in so far the wear and decay of the tissues and retard the down hill step of life. The excessive use or rather abuse of these substances I condemn entirely in youth and age alike. I would add however that the constant swallowing or tippling in the use of alcohol, I consider more dangerous than the occasional outbursts indulged in by some, with lengthened intervals of sobriety.

intervening. The former habit bringing to  
 far more rapidly all the nervous debilitating  
effects connected with the abuse of this article.

I now turn to consider certain causes  
 of nervous prostration resulting from the  
 particular occupation in life in which the  
individual is engaged. Some of these act-  
 through the muscular system such excessive  
exertion constantly being required that his  
 nervous power is as much lowered  
 by it, as it is in others through severe  
mental strain and long and anxious  
attention. As an example of the latter,  
 take the signalman on duty at some of  
 our large central railway junctions, with  
 several consecutive hours of close attention  
 and anxiety,—to those who know the  
 fatigue of such a strain, ~~little~~ wonder  
 or blame in the event of an accident, as  
 that lately at Penzance, is to be attached



to the overworked man in charge.

Under this head of Occupations in life certain localities fall to be considered where particular trades are carried on, the atmosphere and gaseous emanations of which play an important part in producing nervous prostration.

In concluding this resumé of causes producing "nervous exhaustion" in a previously sound subject, I would refer for a moment to the influence which the emotional part of our natures plays.

Our affections or emotions are divided into two classes the Benevolent and the Malevolent. Now in the play of these it is found that most injury and waste is occasioned by our nervous organisation by the outbursts of the latter. Hatred and Anger bring rise to greater prostration than love or

or patience. Although its effect at first may seem transitory yet in the person who is constantly giving way to the malvolent principles of his nature, the pressing effects will show themselves sooner or later. The manner of action of these principles may be seen in the results of Anger. Slight Anger causes paralysis of the minute vessels, hence the red face accompanying it, more passion on the other hand causes depression of the heart's action hence the white face connected with its outbursts. People have been known to die in a fit of passion from Cardiac paralysis; while constant and frequent outbursts of passion are seen to lead to central congestion, softening of the brain, and Insanity.

I now pass however to those

Causes of Nervous Debility which are "Hereditary".

Under this head I propose to place at some of the conditions of life and health which in the parents become the sources of

nervous tendencies in the child. Anything that will produce poverty of or disturb the state of the blood will act as a factor of nervous disorder in the

child. Syphilis for example may act in such a manner, the infant of such parents - possessing that peculiar old-manish or winged appearance, so well known to all.

The syphilitic poison seems to act as an arresting agent in the development of the child, and what more likely to follow such an influence than that the child shd. be a weakling both mentally and physically. It has been shown by "Griesinger" that mental

disorders sometimes occur in the course of Acute Rheumatism, the affection of the joints for the time being abating. He explains this from the vitiated state of the blood in this disease and it is on the same principle that I hold the vitiated state of the blood in its parent in syphilis, affects the child. Apart from specific taints in the parents other causes exist which act as powerfully on the offspring. As one of those, you have the fatigue and poorness of blood induced in the mother the subject of too frequent child bearing, along with the strain of the continual nursing consequent. So debilitated does she become that the younger members of the family will have a tendency to be, if they are not actually, below

far both in mind and body.

Certain diseases also which are peculiar to the female sex, if in operation during gestation, may so act as to produce a debilitated state of matters in the child. And in regard to this it should be borne in mind, that a very small cause acting during gestation, may give rise to very large results at birth; for instance a blow in the vicinity of the uterus giving rise at birth to the production of a deformed infant, etc.

Passing from this aspect of the subject, we have also to consider the "Mental" conditions of the parents.

We have but to view the hereditary nature of insanity, to see how the mental state of the parent may effect the child.

Also how certain propensities are transmitted from the one to the other

such as the inherent-disposition to lying,  
 thieving, sexual excesses, and other vicious  
 courses. Certain diseases in the parents  
 must also be taken into account—regarding  
 their influence on the child, such as  
 Scrophula and Epilepsy. I would note  
 also the social condition of the parents,  
 incessant toil and but the lean and  
scanty comforts of life, well so wear  
 out their own vital powers that a  
like condition of weakness will manifest  
 itself in the children born to them  
 in such circumstances. The state of  
 the parents leads me now to speak  
 for a moment of the effects of "consanguin-  
 -ity of Marriage". Intermarriage is uni-  
 -versally considered to entail degeneration  
 on the offspring. Such a conclusion  
 has been arrived at from what  
 is seen in certain places where "inter-

marriage" amongst those near of Hui, has been practised for some generations.

The physical deformity and mental debasement of the "Capets of the Pyrenees", of the "Marsons of the Auvergne", and of the "Bretons of the Alps", are said to be the result of inter-marriage. This opinion is supported also by the history of deaf-mutism and idiocy. But on the other hand, we have the apparent denial of such an idea from the unimpaired and healthy condition of the Jews, and certain small Mohammedan communities in India, as well as in certain isolated tribes amongst the North American Indians.

If we seek for the truth by taking an analogy from the lower animals, in them we find the finest specimens are obtained in the process of "breeding in

and in." The "Stud Book" of England shows that the finest and fleetest horses, are the direct descendants of a select few.

What then are we to say about the effects of "intermarriage" upon the offspring?

The truth I think is something like this;— if the parties marrying possess any peculiar family tendency mental or physical, it will be intensified and brought into more active existence, in the children of such a marriage. While on the other hand had each of these parties married into a strange family, the hereditary tendency would have been neutralized to a great extent by the admixture of foreign blood. I still lean however to the opinion that "breeding in and in," in the human subject may result in the production of a finer, more delicate and exquisite organization, than if the



Stock had been crossed; though in virtue of  
 that very refinement of structure it  
 will be the more easily thrown into disorder  
 and disease. Before bidding adieu  
 to this subject of hereditary causes,  
 let me advert for a moment to  
 certain habits in the parents which  
 may affect the child. Of these Im-  
temperance may be said to take a  
 foremost rank. "Dr. Howe" of Man-  
 -chusetts has published some statistics  
 regarding the causes of idiocy, from  
 which it appears that out of 300  
idiots as many as 145 were the issue  
 of intemperate parents. From the  
 fact also that "Chronic Alcoholism" in the  
 parents is a recognized source of idiocy  
 in the child, one can easily see how  
 immorality, abuse of opium, and such  
 like indulgences, may transmit their

influence not only the child but also the grandchild. So much then for the various causes hereditary and induced, connected with nervous debility.

I now pass on to consider the "Consequences or Manifestations", which result from the operation of the foregoing causes.

They present themselves under two aspects - the "Physical" and the "Mental".

In the former the deranged nervous force manifests itself in some gross bodily disturbance or physical flaccidness.

While in the latter some form of mental disorder, is the result. Mental diseases, are in fact - nothing more than "nervous disorders" in which the mental symptoms predominate; other nervous disorders there are where bodily symptoms alone prevail and at this latter section we shall

now place for a little. Our attention will be confined to only a few of these by way of illustration. And first I would speak of "Epilepsy". The immediate cause of the fit here seems to be the interruption of the nutritive supply of blood to the brain. The state of system leading to such a condition, is no doubt that of exhaustion, whether hereditary or induced.

Childhood, during the age of the second dentition is a period when this disease often first shows itself, and at that period I take it to be the result of the local irritation existing; And an example of that interference with the natural course of currents from the Nerve Centres, that I have already noticed in my list of causes.

So also in the Epileptic attacks at a

about the commencement of puberty or  
 in those the result of sexual abuse; the  
peripheral irritation of the organ being the  
 agent at work, which by reversing the  
 normal current of currents cause that  
explosion, resulting in a fit. Now  
 we know that stimulation of  
sensory nerves give rise to contraction  
 of the smaller arteries in the brain,  
 this condition of things if kept up  
 resulting in anaemia of that organ,  
 and such is the appearance it  
 generally presents in epileptics.

It is in this manner that I account  
 for sexual excesses leading to  
epilepsy. That form of the disease  
 however which in the child leads  
 to idiotcy has a much deeper seated  
cause, - most likely in the hereditary  
family neurosis. Insanity in the

parent, appearing as Epilepsy in the child; just as Epilepsy in the parent may have its outcome as Insanity in the child. The insane neurosis and the Epileptic are very closely allied, both possessing the tendency to burst-out in convulsive explosions of violence.

I would now look shortly at "Chorea" and "Locomotor Ataxia" as examples of the physical consequences of nervous exhaustion. The first of these is peculiar to youth, and though the exciting cause may be some local source of irritation; un-dermining the natural base of nerve currents, as worms etc.; yet the sufferers from this malady are generally seen when inheritors of a strongly marked nervous temperament; emotional and changeable in their nature,

and very liable to derangements of the Arterial System. The quality of the Blood, plays not an unimportant part it would seem, in the occurrence of this disease, for the circulation of the Pneumatic Prison ill it, has a close relation with chorea. The second of these diseases namely - "Ataxia" is generally the result of induced causes. Exposure to cold and damp for a lengthened period of time is said to produce this disease. Therefore the locality in which certain occupations are carried on in, will have an influence in its appearance in the life of certain men. But intemperance and sexual excesses are the main causes at work, especially when the two are combined in the same individual. Mental Anxiety is said to have its influence also, but -

This holds quite a secondary place to the two sources just mentioned. At this moment I have two cases in my mind, the age of the patients, 27 and 31 respectively, sons of the same parents with a capital family history, and both now are "ataxics". The causes in operation were the same, sexual excesses and alcoholic indulgence, during a lengthened period of residence in a tropical climate as officers in the Indian Army.

The debilitating consequences of "sexual excesses" which affect the general system, were I to enter fully into them would require a volume to themselves. I shall therefore here only refer in a few words to those conditions which show themselves in the sexual system itself, and in it only. Impotence, and sterility

are both painful remedies, upsetting the mental equilibrium of the sufferer to no small degree. Following under this head we have also "Hysteria" with all its depressing anxieties, but to enter into these as well as the loss of erectile power etc: etc: would lead me away into paths alike tedious to myself and my readers. Suffice it to say, that the effects arising from these sources of debility may more upon the mind than any other form of exhaustion known.

The other diseases I direct attention to as special consequences of nervous prostration are, Anorexia, Hysteria, Paralysis, Asphyxia, Pectus and Asthma.

First then as to Anorexia. From the close connection of the organs of Digestion with the "Sympathetic System" and also: it with the Cerebral and Spinal Systems,



we can easily see how their functions may be deranged through faults in the systems which govern them. The Mental depression, sleeplessness, and misery accompanying Dyspepsia, I do not look upon as results of the disease but as factors in the cause of it.

In proof of this Dyspepsia is seen more in the highly cultivated and refined whose mental faculties have undergone greater wear and tear than those of the peasant or Mechanic. Further, one of the first symptoms of "Nervous Exhaustion" when the Cerebral Causes is loss of "Appetite".

At this very moment I am conscious that in the writing of this essay during the last hour, I have lost that desire for food which I had when I sat down; while

on the other hand, had I began with a loaded stomach, a severe headache with inability to concentrate my thoughts would have ensued. Such effects - are produced by the intimate relation which my stomach bears to my cerebral-centre, and so far to prove that Dyspepsia, excepting where due to structural change in the stomach itself, is the result of deranged nervous force.

The abuse of alcohol, opium, tea, or tobacco often produces this dyspeptic condition, and as these substances act probably on the nervous tissues alone - excepting the inhibitors of rascals spirits - they further the view that the disease is one of "nervous origin".

Secondly regarding Hysteria - Here all the parts of the nervous system

seem to be in a state of unnatural in-  
stability, giving rise to such a variety of  
 symptoms that it may simulate almost  
 any known disease. The sympathetic  
system suffers mainly in such cases  
 and the nervous substance throughout  
 seems to be generally badly nourished.

The deranged condition of the urine  
system in the female, accompanying

this disease, I do not consider  
 as the cause of it, but rather  
 the effect, from certain changes  
 which have taken place in the  
nerve centres. But now to refer  
 briefly to Paralysis; I would speak  
 only of what is termed "Constitutional  
Paralysis" Not that due to central  
 causes such as embolism, thrombosis,  
effusion or pressure. The "Constitutional  
form" seems to arise from some

blood poisoning, or degenerative agency.  
 Such as the poisons of Syphilis, Rheumatism,  
Diphtheria, along with those of Lead and  
Mercury. The Paralysis in such cases is  
 generally of a local nature affecting  
 a particular organ or limited portion  
 of the Muscular system, for instance  
 the "Drop wrist" of Lead palsy, or the  
Dysphagia following Diphtheria. So  
 much for Paralysis the result of changes  
 in the state of the blood. And now  
 we draw to a conclusion a word  
 or two regarding "Angina Pectoris" and  
Asthma, — The distressing symptoms  
 of the former may present themselves  
 where no organic lesion of the heart-  
 or great vessels exists, indicating it  
 would seem from some molecular  
perturbation of the cardiac nervous  
supply. The people in whom it

occurs are generally those about fifty years of age and for the most part professional men, in fact, in other words, it is seen mostly in those who are Brain-workers.

This circumstance lends support to the theory above suggested. Furthermore those of a nervous temperament are most liable to it and when once it appears in a family it is apt to become hereditary. Existing apart from any lesion, Spasm of the muscular tissue of the heart is the cause of it. This Spasm is the relaxation of the part of the ultimate fibrillae of the muscles to their natural state of contraction, where the controlling or nervous force is withdrawn. Thus you see Spasm of the muscular tissue of the heart is the result of perturbations in the nerve centres producing discharges.

of nerve force, thus allowing the contractility of the muscular fibre to assert itself, and if the nerve force is not rapidly renewed and its governing influence brought into play, the continuance of the action of the contractile force will end in death. Such is our view of Angina depending entirely on Nervous perturbation.

As to "Asthma" in its Spasmodic form I state it to be a disease of purely Nervous origin, and seen most in people of a Nervous temperament. The Spasm I account for on the same principle as that in Angina. I have now before me the notes of five cases of Asthma occurring in my own experience, all of which were in professional men, and whose duties were mostly of a sedentary nature. In one only do Atmospheric

influences play an important part in the causation of the attacks. The other four seem to be subject- & attacks mostly from Mental Disturbing causes.

For example one had an attack brought on suddenly from getting into a rage on the receipt of a mistaken order from his wine merchant, the fit passing off as quickly when mental calm had been restored.

Little doubt can be entertained of the horrors character of Asthma, and I look upon mine in the light of a hysterical neurosis than an inflammatory catarrh. I take as a proof of this the recorded fact- that asthmatics who have actually contracted a sharp attack of bronchitis, have during the course of the inflammatory disease been free of their ecruy. The Mature

of the fit, its sudden onset, its prevalence during the heat of summer, rather than in the cold of winter - as I have already referred to, all lead truth to its nervous nature. The history of the same person fighting for breath in one locality, and breathing perfectly freely the instant they remove to another, further proves the neurotic character of the disease. Like epilepsy it is apt to be excited by any irritation of the system. vitiated states of old blood also materially influence it, as to see in the gouty and rheumatic, or in the determination of an attack from the sudden suppression of a skin eruption.

I now pass however from these physical consequences of powerful nervous force & speak briefly of the "mental"



manifestations. Regarding the Mental  
 phenomena that result from nervous  
 debility, little can be said, for were  
 one to enter anything like minutely into  
 this division of the subject the labour  
 would be unterminable. This being  
 so I shall only touch on this depart-  
 ment in the way of a few short-  
generalizing remarks. Insanity in all  
 its various forms of Mania, Dementia,  
 etc, is a frequent consequence of nervous  
 prostration. The strong element  
 of heredity plays however a very  
 prominent part in its causation,  
 probably the strongest. Other causes  
 are at work no doubt which act singly  
 in one possessing the hereditary tendency  
 markedly increase its potency. Intemperance  
 perhaps is the most general of these  
 assisting agents. Our mental relations

with the external world depend upon the healthy state of the nervous tissues which act as the conducting medium between the two. Pervert their condition and a twisting of the mental relation with the external world, results.

This is how constant use of Alcohol acts; coagulating the albumen of the nerve substance and abstracting its water, it gives the mind an imperfect machine to act through.

Sexual excesses are no less active exciting agents, bringing the individual first, through loss of power over the will, increasing incoherence and blurring of the intellect, in the end into a state of complete dementia. More certainly will this state of things result when the excess has been after an unnatural

Manner, such as prolonged indulgence  
in Masturbation. In the mental  
conditions resulting from congenital im-  
-perfect development of the senses  
and faculties concerned, we have  
as the issue of this idiocy & imbecility.  
While in those conditions, the result of  
bad courses indulged in by the individual  
himself, we are more likely to have  
Mania or Dementia as the result.

The former states of idiocy and  
imbecility are the results of various  
conditions in the parents; as inter-  
-ference, intemperance, illicit marriage etc;  
while in that particular form of idiocy  
known as Cretinism certain local  
influences are at work, the true  
nature of which are still so far  
shrouded in mystery. In Mania  
on the other hand hereditary tendency

No doubt plays a certain part; but various  
 causes and circumstances in the life  
 of the individual himself have the  
 preponderating influence here. This  
 holds good also of dementia. As  
 to the various forms of mania, such  
 as Intellectual mania, General & Partial;  
 or again Moral Mania, General & Partial,  
 time and space will not admit of  
 me treating. I would only observe  
 that the causes at work here  
 are those often of a purely mental  
 character as Religion, jealousy, fear,  
 love, Ambition etc. In closing my  
 subject now to a close I would  
 refer in a single sentence to that  
 form of Mental disorder called  
Melancholy. It is closely connected  
 with over lactation and is seen  
 mostly in the female sex, the longer

the child is suckled the more does this state of depression increase.

Whatever then fine produces bodily depression and exhaustion would seem to give rise to this mental condition.

It is a sort of sympathetic insanity, and the mental state produced by it is in many cases closely connected with suicidal tendencies.

And now a final word regarding the Principles of Treatment - and I am done. The good old proverb is the golden rule here namely, "Prevention is better than cure". Let the physical and mental causes be avoided. Specially would I direct attention to the early up-bringing and moral training of the child. Healthy employment for young and old is essential. Carefully and well assorted marriages.

are to be studied. But should we have a case where such rules of prevention have not been adhered to, and "nervous exhaustion" and its consequences are already manifesting their presence, the great "sheet-anchor" of hope is to uphold the general nutrition of both mind and body. The body to be supported by dietetic and hygienic measures suitable, while the mind to have healthy pursuits not of a monotonous character, but a judicious variety being studied.

Therapeutic agents are to be chosen as the case requires. And lastly the careful employment and experienced selection of some form of electricity, the patient-use of which will produce beneficial results in a large proportion of cases;

improving Nutrition, the state of the blood,  
And the force of the circulation, enlivening  
and exhilarating the whole frame, and  
giving the individual that buoyancy  
of spirit. which is the great charm  
of a healthy Constitution.

Jm B. Morris